DIRECTORS PRESENT

Edward Mandich, Committee Chair Stephen Dopudja, Committee Member

STAFF PRESENT

Hector Ruiz, General Manager
Michael Perea, District Secretary
Lorrie Lausten, Engineer
Kris Hanberg, Wastewater Department Chief Plant Operator
Gary Kessler, Water Department Chief Plant Operator
Jason Stroud, Maintenance Technologist II

PUBLIC PRESENT

There were no members of the public present.

CALL MEETING TO ORDER

Director Mandich called the March 2, 2016, Engineering/Operational Committee Meeting to order at 7:00 AM.

VISITOR PARTICIPATION

No comments were received.

ORAL COMMUNICATION

No comments were received.

COMMITTEE MEMBER COMMENTS

Director Dopudja commented on the recent rain event.

Director Mandich had no comments.

REPORT FROM THE GENERAL MANAGER

Mr. Ruiz reported the following matters:

- Mr. Ruiz commented on his attendance at the Municipal Water District of Orange County (MWDOC) Orange
 County Water Planning Meeting which highlighted the importance of emergency response to water
 demands and points of dispensary (PODs) in the county. Discussion occurred concerning the use of
 specialized water trailers and limited resources.
- Mr. Ruiz mentioned that the U.S. Army Reserve Unit has offered to work with the District on emergency response training exercises on April 8, 2016. The training exercise is mutually beneficial as the Army reserves have previously coordinated with the District for providing emergency generators and assistance.

- Mr. Ruiz commented that Water Operations staff responded to an emergency pipeline break over the past weekend. The disruption in water service affected four customers, whom were provided temporary water service.
- Mr. Ruiz mentioned that the South Orange County Wastewater Authority (SOCWA) has scheduled a Special Board Meeting for March 10, 2016 regarding the AWMA Bridge closure.

ITEM 1: ENGINEERING/OPERATIONAL COMMITTEE MEETING RECAP

The February 3, 2016, Engineering/Operational Committee Meeting Recap was presented to the Committee.

RECOMMENDED ACTION

The Committee approved the meeting recap and recommended that the Board receive and file the February 3, 2016, Engineering/Operational Committee Meeting Recap (Consent Calendar).

ITEM 2: ALTERNATE RAW WATER TRANSMISSION LINE - PW79

Mr. Ruiz provided a status update on this project, and mentioned that District staff is currently working with Cornerstone (Consultant) on completing the right of way requirements. Mr. Ruiz added that he expects the work to be completed in the next week due to finalizing the legal description language for the Irvine Ranch Water District (IRWD) property. Discussion occurred concerning the status of the required permits with the City of Lake Forest; Ms. Lausten commented that District staff has submitted the application for the bridge crossing conditional permit, and is scheduled to meet with County of Orange Parks and Trails the following day to discuss submittal of the encroachment permit with the County. Mr. Ruiz commented that based on discussions with Tetra Tech (Consultant) that the District may possibly need an easement from the City of Lake Forest for the project.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 3: BAKER WATER TREATMENT FACILITY

Mr. Ruiz provided a status update on this project, and mentioned that the Project Committee is scheduled to meet on March 10, 2016. Mr. Ruiz added that IRWD is scheduled to discuss and review the facility's operational plan and requirement at the Meeting, and that more information concerning project change orders and claims will be provided at the Regular Board Meeting.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 4: DISCUSSION AND POSSIBLE ACTION(S) RELATING TO TCWD'S DOMESTIC WATER STORAGE AND RESERVOIR SITING STUDY

Mr. Ruiz presented this new item for Committee review, and commented that District staff has been working with PSOMAS (Consultant) on this project for months in order to evaluate the opportunity for additional emergency storage capacity at the Saddle Crest development. Mr. Ruiz presented an overview of a draft figure in the report that outlines potential reservoir sites being considered, and mentioned that District staff anticipates completing the draft report for committee review at the April Committee meeting. Discussion occurred concerning certain information specific to service area water demands by 2020 and planned reservoir upgrades. Mr. Ruiz added that additional emergency storage and its funding by the Water Reliability and

Emergency Storage Fee was a key reason for the need of a new reservoir or increase in reservoir capacity through a development like Saddle Crest.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 5: DISCUSSION AND POSSIBLE ACTION(S) RELATING TO TCWD'S 2015 URBAN WATER MANAGEMENT PLAN

Ms. Lausten presented this new item for Committee review, and commented that District staff has been working with Arcadis (Consultant) on the first version of the draft 2015 Urban Water Management Plan (UWMP). Ms. Lausten added that a new requirement based on recent legislation (SB 555) for the 2015 UWMP is the completion of a Water Audit by an independent third-party, and that she has been working with WSO (Consultant) to complete this item. Ms. Lausten reviewed the UWMP Schedule Project Milestones, and mentioned that District staff has mailed the 60-day Notification Letter to Cities and Counties within the District's service area. Ms. Lausten commented that the final draft UWMP will be presented for Board review at the May 2016 Regular Board Meeting.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 6: DISCUSSION AND POSSIBLE ACTION(S) CONCERNING COOKS RESERVOIR - REPLACEMENT

Mr. Ruiz presented the item for Committee review, and mentioned that District staff has evaluated the cost effectiveness of repairing or replacing the tank due to severe corrosion to the structure and sidewalls of the tank observed in past and recent inspections. Mr. Ruiz reviewed photographs of the tank with the Committee, and highlighted the remote location of the facility and some of the challenges associated with the project. Mr. Ruiz said that staff reviewed the bid proposals for the work completed on the Dimension Water Treatment Plant's clearwell, and noted the similarities in the tank size and construction. Mr. Ruiz mentioned that based on the successful construction of the clearwell by Superior Tank, the low bidder, that staff solicited a cost proposal by Superior Tank Inc. for the construction and replacement of the tank for an amount of \$83,466, and recommended that the Committee forward the proposal to the Board of Directors for approval. Discussion occurred concerning the history of the reservoir and its purpose as a critical regulating facility for the District's Ridgeline Booster Pump Station.

RECOMMENDED ACTION

The Committee received the information concerning the replacement of Cooks Reservoir, and recommended that the Board of Directors approve the contract to Superior Tank Company, Inc. for an amount of \$83,466.

ITEM 7: OTHER ENGINEERING AND OPERATIONS PROJECTS

1. Recycled Water Conversion Project Opportunities

Mr. Ruiz provided a status update for this project, and mentioned that this project was approved by the Board of Directors at the February 17, 2016, Regular Board Meeting. Mr. Ruiz added that District staff has held a preconstruction meeting with the Contractor, and that the property owner has submitted the Onsite Retrofit Application to Metropolitan Water District of Southern California (MET) for the rebate. Discussion occurred concerning the project budget and timeline for completion.

2. Orange County Water System Gap Analysis

Mr. Ruiz had no updated information on this project.

3. Other Projects

Mr. Ruiz reported on the planned replacement of the Canyon Creek Hydro-pneumatic Tank. Mr. Ruiz presented photographs of the condition and status of the existing tank, and recommended possible improvements to the facility. Discussion occurred concerning possible impacts to the homeowners and the potential for relocation of, and improvements to, the existing pipeline.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 8: DISCUSSION AND POSSIBLE ACTION(S) CONCERNING THE PLANO TRABUCO DEVELOPMENT, WILLIAM LYON HOMES, INC., CITY OF RANCHO SANTA MARGARITA (36 UNIT TRIPLEX BUILDING DESIGN)

Mr. Ruiz provided a status update on this matter to the Committee, and mentioned that District staff held a kick off meeting with the developer and contractor at the project site. Mr. Ruiz commented that District staff is awaiting the required submittals, and that the utilities are scheduled to begin construction the following week. Mr. Ruiz mentioned that he is working with special legal counsel and an appraiser for the procurement of sewer and water easement extensions within the adjacent shopping center.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 9: SKYRIDGE DEVELOPMENT (84 DUs)

Mr. Ruiz provided a status update on this development, and reported that Santa Margarita Water District (SMWD) currently has the Agreement for Provisions of Certain Services and Purchase of Capacity Rights for review, comment, and subsequent approval by their Board of Directors. Ms. Lausten commented that DMc Engineering (Consultant) is doing an excellent job performing the onsite inspections of the development, and that the contractor is scheduled to complete the 'hot tap' pipeline connection for the development in the following week.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 10: SADDLE CREST DEVELOPMENT

Mr. Ruiz provided a status update on this development, and mentioned that District staff is currently working on the Will Serve Letter for the development. Mr. Ruiz added that he recently met with the developer for more information concerning the construction of the proposed onsite reservoir and to discuss cost sharing component options. Mr. Ruiz mentioned that a draft Will Serve Letter may be presented at the following Engineering/ Operational Committee Meeting.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 11: ACTIVE DEVELOPMENTS

1. Summerfield Homes, County of Orange – Tract 15800 (5 DUs | WSL)

Ms. Lausten provided a status update on this development, and mentioned that District staff is working with the developer on the relocation of the onsite backflow prevention devices and replacement of damaged water meter boxes.

2. Oaks at Trabuco, County of Orange (9 DUs | WSL)

Ms. Lausten commented that the developer is currently planning the construction of a new home next to the future onsite wastewater treatment facility.

3. Other Active Developments

Ms. Lausten commented that the Hillside Montessori School (School) is interested in connecting to the sewer that is under construction by the adjacent Skyridge Developer, and that staff has met with the School and the Skyridge Developer to discuss connecting to the District's sanitary sewer system.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 12: WATER SYSTEM STATUS

Mr. Kessler presented the Water System Status Update through February, 2016, and reported on the following matters:

- 1. Water Department staff worked with Maintenance Department staff to install the rebuilt 2cfs pump at the Ridgeline Booster Pump Station.
- 2. Water Department staff prepared for the 7-day shutdown of the Santiago Lateral Pipeline and conducted preventative maintenance at the Dimension Water Treatment Plant.
- 3. Water Department staff repaired an emergency 8-inch pipeline break on Santiago Canyon Road, which disrupted water service for a small number of customers. Mr. Kessler added that the Water Department provided temporary water service connections during the repair. Mr. Ruiz mentioned that District staff would like to design a permanent solution to move the affected customers to the 12-inch pipeline on Santiago Canyon Road.

Mr. Kessler provided an updated Monthly Water System Operations Summary report for February, 2016, for Committee review, and provided additional information for calendar year 2013 for comparison purposes. Discussion occurred concerning the current conservation efforts of District customers; Mr. Kessler commented that the District's customers demand was 9% more in month of February, 2016, in comparison to February, 2013.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 13: WASTEWATER SYSTEM STATUS

Mr. Hanberg presented the Wastewater System Status Update through February, 2016, and reported on the following matters:

- 1. Wastewater Department staff raised a sewer manhole ring on Eastglen Drive in Trabuco Highlands.
- 2. Wastewater Department staff completed weed abatement at the Shadow Rock Detention Basin Facility.
- 3. Wastewater Department staff conducted Source Control Inspections for Commercial accounts in compliance with the District's FOG Program

Mr. Hanberg provided an updated Monthly Recycled Water System Operations Summary for February, 2016, for Committee review, and mentioned that the Dove Lake freeboard was at 3.6 feet due to the recent rain events. Mr. Hanberg added that the meter for Tick Creek Pump Station was replaced during February, and that he will report the usage from the recently installed recycled water hydrant connection for construction water purposes on a monthly basis.

RECOMMENDED ACTION

The Committee received the status update, no action taken.

ITEM 14: OTHER MATTERS/REPORTS

Mr. Ruiz reported the following other matters:

- 1. Mr. Ruiz reported that the District participated in the Water Emergency Response of Orange County (WEROC) Radio Study, and that District staff is working to install additional vehicle-mounted radios to certain vehicles in the District's Fleet which have greater power and signal clarity in the canyon areas and hilly terrain as compared to the currently used handheld radios.
- 2. Mr. Ruiz provided a brief update on MWDOC's Rate Study, and presented a handout of a powerpoint presentation from MWDOC's Administration and Finance Committee for Committee review. Mr. Ruiz commented that this matter will be agendized for discussion at the Finance/Audit Committee Meeting, and highlighted the results from MWDOC's Guiding Principles Survey and the Survey Results Comparison between MWDOC and its member agencies. Discussion occurred concerning the MET Rate Study and proposed cost increases for untreated water purchases.

ADJOURNMENT

Director Mandich adjourned the March 2, 2016, Engineering/Operational Committee Meeting at 8:28 AM.